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#### REMARKS

Careful consideration has been given by the applicants to the Examiner's comments and rejection of the claims as set forth in the outstanding Office Action, and favorable reconsideration and allowance of the application, as amended is earnestly solicited.

Applicants gratefully acknowledge the Examiner's indication that at least Claims 28 and 29 are considered to be directed to allowable subject matter, and would be allowed if incorporated into an independent claim or rewritten in independent form.

Furthermore, however, applicants note the Examiner's rejection of the various claims under 35 U.S.C. 112, first paragraph and 35 U.S.C. 112, second paragraph, for either containing subject matter not clearly described in the specification or for being indefinite.

Moreover, applicants note the Examiner's objections to the claims as containing improper grammatical terminology.

Concerning the foregoing, in response to the formal grounds of rejection and objection, applicants have implemented appropriate amendments throughout the claims to provide correct antecedent terminology while concurrently amending the claims to clearly set forth the operative integers and their interrelationship, while concurrently patentably distinguishing over the art, irrespective as to whether the latter is considered singly or in combination.

In particular, applicants also note the rejection of various of the claims under 35 U.S.C. 102(b) as being anticipated by Biebuyck et al. U.S. Patent No. 5,817,242; and the rejection of various of the claims as being unpatentable under 35 U.S.C. 103(a) over Biebuyck et al. U.S. Patent No. 5,817,242 in view of Biebuyck et al. U.S. Patent No. 5,925,259, both of these publications being applicants' own patents and commonly assigned to the present assignee.

Accordingly, in order to clearly and unambiguously distinguish over the art, applicants have incorporated Claim 28 into respectively Claims 1 and 2, and further provided structural and function limitations in the remaining independent claims so as to define the positioning of the force transducers in conformance with the description in the specification. In particular, the incorporation of Claim 28 into the independent Claims 1 and 2 renders these claims clearly allowable as also indicated in the Office Action, and also renders the various dependent claims to be considered in condition for allowance by being dependent from allowable independent claims.

Concerning the location of the force transducers as set forth in Claims 14 and 15, and the various dependent claims, these have been defined as being arranged proximate the margins of the patterned areas or layers, and moreover, appropriate structures have been defined which divide the areas which are free of structures into independent or separate regions.

The foregoing terminology has now been clearly defined in the claims and is deemed to distinguish over both of the Biebuyck U.S. patents, none of which disclose the force transducers analogous to the present invention, whereas the remaining independent claims set forth limitations incorporating allowable Claim 28 defining the physical properties of the material with regard to their stretching abilities.

Inasmuch as the claims have been amended so as to be directed to clearly allowable subject matter, while currently having been revised to obviate the formal grounds of rejection, the early and favorable reconsideration of the application by the Examiner is earnestly solicited. However, in the event that the Examiner has any queries concerning the instantly submitted amendment, applicants' attorney respectfully requests that he be accorded the courtesy of possibly a telephone conference to discuss any matters in need of attention.

With regard to the submission of the required certified copy, this will be submitted in due course as requested by the Examiner.

Finally, pursuant to the requirements, applicants also enclose a "Version with Markings Showing Changes Made" to facilitate the Examiner's review of the amendments being presented herewith.

Respectfully submitted,

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### **VERSION WITH MARKING SHOWING CHANGES MADE**

#### **IN THE CLAIMS:**

Claim 28 has been cancelled.

Claims 1, 2, 9-16, 21-25, 27 and 29 have been amended as follows:

1. (Twice amended) Stamp device for printing a pattern on a surface of a substrate having a two-sided rigid carrier layer providing on [it's] a first side thereof a patterned layer made of a first material and being combined on [it's] a second side opposite said first side with a soft layer made of a softer material than said first material, said patterned layer being stretched to selectively compensate thermal, chemical, and/or mechanical induced deformation of said patterned layer to result in accurate prints; and

said carrier layer describes an x-y-plane in which said carrier layer is rigid and said carrier layer is flexible in a direction perpendicular to said x-y-plane.--

2. (Twice amended) Stamp device for printing a pattern on a surface of a substrate comprising:

a two-sided rigid carrier layer providing on [it's] <u>a</u> first side <u>thereof</u> a patterned layer made of a first material and a contact means having at least one soft layer made of softer material than said first material for contacting [the] <u>a</u> second side off said carrier layer, <u>said</u> <u>patterned layer being stretched to selectively compensate thermal, chemical, and/or mechanical induced deformation of said patterned layer to result in accurate prints; and</u>

said carrier layer describes an x-y-plane in which said carrier layer is rigid and said carrier layer is flexible in a direction perpendicular to said x-y-plane.--

- 9. (Amended) Stamp device according to claim 8, wherein said press means is a roller element [like] comprising a cylindrical press having at least partially a cylindrical surface.
- 10. (Amended) Stamp device according to claim 2, wherein said contact means is a roller element [like] comprising a cylindrical press element having a least partially a cylindrical surface.
- 11. (Amended) Stamp device according to claim 1, wherein said patterned layer provides at least one force transducer zone arranged proximate the margin of said patterned layer for monitoring a force induced load acting between said stamp and said substrate.
- 12. (Amended) Stamp device according to claim 11, wherein said force transducer zone provides a patterned structure surrounding at least an area free of structures and [in] <u>proximate</u> said area free of structures [additional structures] <u>there</u> are provided <u>structures</u> which [narrows] <u>bounds</u> the area free of structures in at least one direction.
- 13. (Amended) Stamp device according to claim 11, wherein said force transducer zone provides a patterned structure surrounding at least an area free of structures; and [in said area free of structures additional structures, like] linear structures[,] are provided which divide said area free of structures in at least two sections.

14. (Twice amended) Stamp device for printing a pattern on a surface of a substrate having a two-sided rigid carrier layer providing on [it's] <u>a</u> first side <u>thereof</u> a patterned layer made of a first material and being combined on [it's] <u>a</u> second side <u>opposite said first side</u> with a soft layer made of a softer material than said first material,

wherein said patterned layer provides at least one force transducer zone extending along the martins thereof for monitoring a force induced load acting between said stamp and said substrate,

said force transducer zone provides a patterned structure surrounding at least an area free of structures; and [in said area free of structures additional structures, like] <u>includes</u> linear structures[, are provided] which divide said area free of structures [in] <u>into</u> at least two sections,

wherein at least two <u>said</u> linear structures [being] <u>are arranged to extend</u> perpendicular to each other and dividing said area free of structures <u>into</u> at least into three sections.

15. (Twice amended) Stamp device for printing a pattern on a surface of a substrate having a two-sided rigid carrier layer providing on [it's] <u>a</u> first side <u>thereof</u> a patterned layer made of a first material and being combined on [it's] <u>a</u> second side <u>opposite said first side</u> with a soft layer made of a softer material than said first material,

said patterned layer [provides] <u>providing</u> at least one force transducer zone for monitoring a force induced load acting between said stamp and said substrate,

said force transducer zone is placed in an area near an edge of said patterned layer.

16. (Amended) Stamp device according to claim 1, wherein said patterned layer provides patterned structures for printing said surface of said substrate [and], said patterned structures

being separated from each other by areas free of structures; and [in said areas free of structures] support structures[, like] in the form of posts or lines, are provided for preventing said areas free of structures from sagging and contacting said substrate by applying a load onto said stamp device.

- 21. (Amended) Stamp device according to claim 19, wherein at least two layers of said fluidic or gas network are stacked on top of each other to allow formation of multidimensional networks [that an give] <u>providing</u> access to a multitude of substances [to] <u>at</u> a multitude of locations without level intersections.
- 22. (Amended) Stamp device according to claim 1, wherein said patterned layer [as well] and the surface of said substrate [comprising] comprises self-aligning means providing for an accurate relative positioning during the printing process.
- 23. (Amended) Stamp device according to claim 22, wherein said self-aligning means comprises lock and key elements with lock elements of a constant shape and distance and <u>said</u> key elements <u>being</u> of variable shape [being] smaller than said lock elements and [getting] increasingly larger for fitting without any mismatch into said lock elements.
- 24. (Amended) Stamp device according to claim 23, wherein said lock and key elements [having] have tapered flanks.

- 25. (Amended) Stamp device according to claim 23, wherein said lock and key elements [being] are arranged in a row along which said patterned layer and said substrate [being] are brought into contact.
- 27. (Amended) Stamp device according to claim 22, wherein aid key elements are made from the same material as the hard support posts [(PMMA)].
- 29. (Amended) Stamp device according to claim [28] 1, wherein said first material of said patterned layer has a thermal expansion coefficient [being] which is greater than the thermal expansion coefficient of said rigid carrier layer.